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# Is it possible to have a short, leftward past and face a long, rightward future?

Argyro Vagia[1], Georgia-Anna Chandridi[1], Eleni Orfanidou[2], Argiro Vatakis[1,3,*]

[1]*Post-Graduate Programme in Basic & Applied Cognitive Science, University of Athens, Ano Ilisia, Athens, 15771, Greece*
[2]*Department of Psychology, University of Crete, Rethymno, 74100, Greece*
[3]*Cognitive Systems Research Institute (CSRI), 7 Makedonomachou Prantouna Str., Athens, 11525, Greece*

**Abstract**

Do we estimate time in a different way when talking about last year's holiday or when planning the next one? In other words, does time – being both a concept and a context – has an impact on the way we perceive the duration of an event? And, do the different temporal concepts reflect to distinct spatial points? As far as language is concerned, the main focus of the research emphasizes on the relation between time and space, either in terms of language metaphors (Boroditsky, 2000, 2001; Casasanto & Boroditsky, 2008; Casasanto et al., 2004), or reaction times, when words and sentences of several temporal concepts are being presented in different points in space or responded by spatially distinct keys (Santiago et al., 2007; Torralbo, Santiago, & Lupiáñez, 2006; Ulrich & Maienborn, 2010). Many of the studies result on the existence of a mental time-line that resembles a spatial organization, with past and short durations being represented on the left side of space, while future and long durations on its right extreme for western populations (see Bonato, Zorzi, & Umiltà, 2012, for a review).

Taking into account that duration estimation comprises a fundamental dimension of time perception, it seems rather strange that reproduction tasks have not yet been used to test the above-mentioned claim and, in general, the fact that temporal concepts have not been investigated through temporal tasks, but solely through spatial tasks. If time is indeed represented in terms of space, then that should be demonstrable not only in a task based on the speed by which a time concept is being recognised (Santiago et al., 2007; Torralbo, Santiago, & Lupiáñez, 2006), but on other aspects of timing, such as the duration of the presented concept(s). That is the focus of the present study. Specifically, we investigated the interaction of temporal concepts (past vs. future reference, long vs. short duration) and spatial directionality of the response, during the reproduction of 2, 3, and 6 s stimulus presentations. In our experiment, participants had to estimate and reproduce the duration of a blue square, while reading concepts of different temporal contexts (e.g., future related words) by responding in four, spatially distinct areas (front vs. back, right vs. left; in different experimental blocks). The results are being discussed in the frame of the Conceptual Metaphor Theory.


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* Corresponding author. Tel.: +30 211 012 4543; fax: +30 211 012 4544.
*E-mail address:* argiro.vatakis@gmail.com


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